

Total Petroleum
MID 005358130

5-29-86

Appendices: A-1, A-2
B, C

Inspector: T. McNiel
L. Browne



RCRA PART 265

SUBPART F

ERTEC INSPECTION FORMS

APPENDIX - A

COMPLIANCE CHECKLIST FORMS

APPENDIX A-1

FACILITY INSPECTION FORM FOR COMPLIANCE WITH INTERIM
STATUS STANDARDS COVERING GROUND-WATER MONITORING

Company Name: Total Petroleum ; EPA I.D. Number: MID005358130

Company Address: East Superior ; Inspector's Name: McNiel
Alma, MI

Company Contact/Official: Ben White ; Branch/Organization: _____

Title: Environmental Engineer ; Date of Inspection: 5-29-86

Type of facility: (check appropriately)	<u>Yes</u>	<u>No</u>	<u>Unknown</u>	<u>Waived</u>
a) surface impoundment	_____	_____	_____	_____
b) landfill	_____	<u>✓</u>	_____	_____
c) land treatment facility	<u>✓</u>	_____	_____	_____
d) disposal waste pile*	_____	<u>✓</u>	_____	_____

Ground-Water Monitoring Program

1. Was the ground-water monitoring program reviewed prior to site visit?
If "No",

✓ _____

a) Was the ground-water program reviewed at the facility prior to site inspection?

✓ _____

2. Has a ground-water monitoring program (capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility) been implemented? 265.90(a)

✓ _____

*Listed separate from landfill for convenience of identification.

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>	<u>Waived</u>
3. Has at least one monitoring well been installed in the uppermost aquifer hydraulically upgradient from the limit of the waste management area? 265.91(a)(1)	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
a) Are ground-water samples from the uppermost aquifer, representative of background ground-water quality and not affected by the facility (as ensured by proper well number, locations and depths?)	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
4. Have at least three monitoring wells been installed hydraulically downgradient at the limit of the waste handling or management area? 265.91(a)(2)	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
a) Do well number, locations and depths ensure prompt detection of any statistically significant amounts of HW or HW constituents that migrate from the waste management area to the uppermost aquifer?	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
5. Have the locations of the waste management areas been verified to conform with information in the ground-water program?	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
a) If the facility contains multiple waste management components, is each component adequately monitored?	<u> </u>	<u> </u>	<u> </u>	<u> </u>
6. Do the numbers, locations, and depths of the ground-water monitoring wells agree with the data in the ground-water monitoring system program? If "No", explain discrepancies.	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
7. Well completion details. 265.91(c)				
a) Are wells properly cased?	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
b) Are wells screened (perforated) and packed where necessary to enable sampling at appropriate depths?	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
c) Are annular spaces properly sealed to prevent contamination of ground-water?	<u>mostly</u>	<u> </u>	<u>others unknown</u>	<u> </u>

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
8. Has a ground-water sampling and analysis plan been developed? 265.92(a)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a) Has it been followed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Is the plan kept at the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the plan include procedures and techniques for:			
1) Sample collection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2) Sample preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3) Sample shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4) Analytical procedures?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	list a reference no specific methods
5) Chain of custody control?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Are ^{were} the required parameters in ground-water samples being tested quarterly for the first year? 265.92(b) and 265.92 (c)(1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
a) Are ^{were} the ground-water samples analyzed for the following:			
1) Parameters characterizing the suitability of the ground-water as a drinking water supply? 265.92(b)(1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2) Parameters establishing ground-water quality? 265.92(b)(2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3) Parameters used as indicators of ground-water contamination? 265.92(b)(3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
(i) For each indicator parameter are at least four replicate measurements obtained at each upgradient well for each sample obtained during the first year of monitoring? 265.92(c)(2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
(ii) Are provisions made to calculate the initial background arithmetic mean and variance of the respective parameter concentrations or values obtained from the upgradient well(s) during the first year? 265.92(c)(2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) For facilities which have completed first year ground-water sampling and analysis requirements:			
1) Have samples been obtained and analyzed for the ground-water quality parameters at least annually? 265.92(d)(1)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2) Have samples been obtained and analyzed for the indicators of ground-water contamination at least semi-annually? 265.92(d)(2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
c) Were ground-water surface elevations determined at each monitoring well each time a sample was taken? 265.92(e)	<u>✓</u>	<u> </u>	<u> </u>
d) Were the ground-water surface elevations evaluated annually to determine whether the monitoring wells are properly placed? 265.93(f)	<u>✓</u>	<u> </u>	<u> </u>
e) If it was determined that modification of the number, location or depth of monitoring wells was necessary, was the system brought into compliance with 265.91(a)? 265.93(f)	<u>✓</u>	<u> </u>	<u> </u>
10. Has an outline of a ground-water quality assessment program been prepared? 265.93(a)*	<u>Are in assessment now.</u>		
a) Does it describe a program capable of determining:	<u> </u>	<u> </u>	<u> </u>
1) Whether hazardous waste or hazardous waste constituents have entered the ground water?	<u> </u>	<u> </u>	<u> </u>
2) The rate and extent of migration of hazardous waste or hazardous waste constituents in ground water?	<u> </u>	<u> </u>	<u> </u>
3) Concentrations of hazardous waste or hazardous waste constituents in ground water?	<u> </u>	<u> </u>	<u> </u>
b) After the first year of monitoring, have at least four replicate measurements of each indicator parameter been obtained for samples taken for each well? 265.93(b)	<u>✓</u>	<u> </u>	<u> </u>
1) Were the results compared with the initial background means from the upgradient well(s) determined during the first year?	<u>✓</u>	<u> </u>	<u> </u>
(i) Was each well considered individually?	<u>✓</u>	<u> </u>	<u> </u>
(ii) Was the Student's t-test used (at the 0.01 level of significance)?	<u>✓</u>	<u> </u>	<u> </u>
2) Was a significant increase (or pH decrease as well) found in the:	<u> </u>	<u> </u>	<u> </u>
(i) Upgradient wells	<u>✓</u>	<u> </u>	<u> </u>
(ii) Downgradient wells	<u>✓</u>	<u> </u>	<u> </u>
If "Yes", Compliance Checklist A-2 must also be completed.	<u> </u>	<u> </u>	<u> </u>

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
11. Have records been kept of analyses for parameters in 265.92(c) and (d)? 265.94(a)(1)	<u>✓</u>	<u> </u>	<u> </u>
12. Have records been kept of ground-water surface elevations taken at the time of sampling for each well? 265.94(a)(1)	<u>✓</u>	<u> </u>	<u> </u>
13. Have records been kept of required elevations in 265.93(b)? 265.94(a)(1)	<u>✓</u>	<u> </u>	<u> </u>
14. Have the following been submitted to the Regional Administrator 265.94(a)(2) :*			
a) Initial background concentrations of parameters listed in 265.92(b) within 15 days after completing each quarterly analysis required during the first year?	<u>✓</u>	<u> </u>	<u> </u>
b) For each well, have any parameters whose concentrations or values have exceeded the maximum contaminant levels allowed in drinking water supplies been separately identified?	<u>✓</u>	<u> </u>	<u> </u>
c) Annual reports including:			
1) Concentrations or values of parameters used as indicators of ground-water contamination for each well along with required evaluations under 265.93(b)?	<u>✓</u>	<u> </u>	<u> </u>
2) Any significant differences from initial background values in up-gradient wells separately identified?	<u>✓</u>	<u> </u>	<u> </u>
3) Results of the evaluation of ground-water surface elevations?	<u>✓</u>	<u> </u>	<u> </u>

*EPA will be proposing (Spring 1982) to replace this reporting requirement with an exception reporting system where reports will be submitted only where maximum contaminant levels or significant changes in the contamination indicators or other parameters are observed. EPA has delayed compliance stage for 14 a) above until August 1, 1982 (Federal Register, February 23, 1982, p.7841-7842) to be coupled with exception reporting in the interim.

APPENDIX A-2

INSPECTION COMPLIANCE FORM FOR A FACILITY WHICH MAY BE AFFECTING GROUND-WATER QUALITY

Company Name: Total Petroleum ; EPA I.D. Number: MID005358130

Company Address: East Superior ; Inspector's Name: McNiel
Alma, MI

Company Contact/Official: Ben White ; Branch/Organization: _____

Title: Environmental Engineer ; Date of Inspection: 5-29-86

Type of facility: (Check appropriately)	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
a) surface impoundment	_____	_____	_____
b) landfill	_____	<input checked="" type="checkbox"/>	_____
c) land treatment facility	<input checked="" type="checkbox"/>	_____	_____
d) disposal waste pile	_____	<input checked="" type="checkbox"/>	_____
1. Have comparisons of ground-water contamination indicator parameters for the upgradient well(s) 265.93(b) shown a significant increase (or pH decrease as well) over initial background?	<input checked="" type="checkbox"/>	_____	_____
a) If "Yes", has this information been submitted to the Regional Administrator according to 265.94(a)(2)(ii)?	<input checked="" type="checkbox"/>	_____	_____
2. Have comparisons of indicator parameters for the downgradient wells 265.93(b) shown a significant increase (or pH decrease as well) over initial background?	<input checked="" type="checkbox"/>	_____	_____
a) If "Yes", were additional ground-water samples taken for these downgradient wells where the significant difference was determined? 265.93(c)(2)	<input checked="" type="checkbox"/>	_____	_____
1) Were samples split in two?	<input checked="" type="checkbox"/>	_____	_____
2) Was the significant difference due to human (e.g., laboratory) error? (If "Yes", do not continue.)	_____	<input checked="" type="checkbox"/>	_____

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
3. If significant differences were not due to error, was a written notice sent to the Regional Administrator within 7 days of confirmation?	<u> </u>	<u> ✓ </u>	
4. Within 15 days of notification of the Regional Administrator was a certified ground-water quality assessment plan submitted? 265.93(d)(2)*	<u> </u>	<u> </u>	<u> ✓ </u>
a) Does the plan specify 265.93(d)(3) :			
1) well information (specifics)	<u> ✓ </u>	<u> </u>	
(a) number?	<u> ✓ </u>	<u> </u>	
(b) locations?	<u> ✓ </u>	<u> </u>	
(c) depths?	<u> ✓ </u>	<u> </u>	
2) sampling methods?	<u> ✓ </u>	<u> </u>	
3) analytical methods?	<u> ✓ </u>	<u> </u>	
4) evaluation methods?	<u> ✓ </u>	<u> </u>	
5) schedule of implementation?	<u> ✓ </u>	<u> </u>	
b) Does the plan allow for determination of 265.93(d)(4) :			
1) Rate and extent of migration of hazardous waste or hazardous waste constituents?	<u> ✓ </u>	<u> </u>	
2) Concentrations of the hazardous waste or hazardous waste constituents?	<u> ✓ </u>	<u> </u>	
c) Is it indicated that the first determination was made as soon as technically feasible? 265.93(d)(5)	<u> ✓ </u>	<u> </u>	
1) Within 15 days after the first determination was a written report containing the assessment of ground-water quality submitted to the Regional Administrator?	<u> ✓ </u>	<u> </u>	
d) Was it determined that hazardous waste or hazardous waste constituents from the facility have entered the ground water?	<u> ✓ </u>	<u> </u>	
1) If "No", was the original indicator evaluation program, required by 265.92 and 265.93(b), reinstated?	<u> </u>	<u> ✓ </u>	
(a) Was the Regional Administrator notified of the reinstatement of program within 15 days of the determination? 265.93(d)(6)	<u> </u>	<u> N/A </u>	

*See note Page 2-10

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
e) If it was determined that hazardous waste or hazardous waste constituents have entered the ground-water 265.93(d)(7) :			
1) For facilities where program was implemented prior to final closure, are determinations of hazardous waste or hazardous waste constituents continued on a quarterly basis? (If program was implemented during the post-closure care period, determinations made in accordance with the ground-water quality assessment plan may cease after the first determination.)	<u>✓</u>	<u> </u>	
(a) Were subsequent ground-water quality reports submitted to the Regional Administrator within 15 days of determination?	<u>✓</u>	<u> </u>	
2) Were records kept of the analyses and evaluations, specified in the ground-water quality assessment (throughout the active life of the facility)? 265.94(b)(1)	<u>✓</u>	<u> </u>	
(a) If a disposal facility, were(are) records kept throughout the post-closure period as well?	<u> </u>	<u> </u>	
f) Are annual reports submitted to the Regional Administrator containing the results of the ground-water quality assessment program? 265.94(b)(2)*	<u> </u>	<u>✓</u>	
1) Do the reports include the calculated or measured rate of migration of hazardous waste or hazardous waste constituents during the reporting period?	<u> </u>	<u> </u>	

*See note Page 4-3

N/A

APPENDIX A-3

INSPECTION COMPLIANCE FORM FOR DEMONSTRATING
A WAIVER OF INTERIM STATUS REQUIREMENTS

Company Name: _____; EPA LD. Number: _____

Company Address: _____; Inspector's Name: _____

Company Contact: _____; Branch/Organization: _____

Title: _____; Date of Inspection: _____

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
1. Is a written waiver demonstration kept at the site?	_____	_____	
2. Is the demonstration certified by a qualified geologist or geotechnical engineer? 265.90(c)	_____	_____	
3. Does the waiver demonstration establish:			
a) The potential for migration of hazardous waste or hazardous waste constituents from the facility to the uppermost aquifer? 265.90(c)(1)	_____	_____	
b) An evaluation of a water balance including:			
1) Precipitation?	_____	_____	
2) Evapotranspiration?	_____	_____	
3) Runoff?	_____	_____	
4) Infiltration? (including any liquid in surface impoundments)	_____	_____	
c) Unsaturated zone characteristics?	_____	_____	
1) Geologic materials?	_____	_____	
2) Physical properties?	_____	_____	
3) Depth to ground water?	_____	_____	

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
d) The potential for hazardous waste or hazardous waste constituents which may enter the uppermost aquifer to migrate to a water supply well or surface water, by evaluation of: 265.90(c)(2)			
1) Saturated zone characteristics, including:			
(a) Geologic materials?	_____	_____	
(b) Physical properties?	_____	_____	
(c) Rate of ground-water flow?	_____	_____	
2) Proximity of the facility to water supply wells or surface water?	_____	_____	

APPENDIX -B

GROUND-WATER MONITORING AND ALTERNATE SYSTEM
TECHNICAL INFORMATION FORM

APPENDIX B

GROUND-WATER MONITORING AND ALTERNATE SYSTEM
TECHNICAL INFORMATION FORM

1.0 Background Data:

Company Name: Total Petroleum ; EPA LD.#: MID005358130

Company Address: East Superior
Alma, MI

Inspector's Name: McNiel ; Date: 5-29-86

1.1 Type of facility (check appropriately):

1.1.1 surface impoundment

1.1.2 landfill

1.1.3 land treatment facility ✓

1.1.4 disposal waste pile

1.2 Has a ground-water monitoring system been established?

(Y/N) Y

1.2.1 Is a ground-water quality assessment program outlined or proposed?

(Y/N) Y

If Yes,

1.2.2 Was it reviewed prior to the site visit?

(Y/N)

1.3 Has a ground-water quality assessment program been implemented or proposed at the site?

(Y/N) Y

If yes, Appendix C, Ground-Water Quality Assessment Program Technical Information Form must be utilized also.

2.0 Regional/Facility Map(s)

2.1 Is a regional map of the area, with the facility delineated, included?

(Y/N) Y

If yes,

2.1.1 What is the origin and scale of the map? USGS Topo
1:24000

2.1.2 Is the surficial geology adequately illustrated?

(Y/N) Y

2.1.3 Are there any significant topographic or surficial features evident?

(Y/N) N

If yes, describe _____

2.1.4 Are there any streams, rivers, lakes, or wet lands near the facility?

(Y/N) Y

If yes, indicate approximate distances from the facility

County drain \approx 50 ft south of waste mgmt. unit.

2.1.5 Are there any discharging or recharging wells near the facility?

(Y/N) Y

If yes, indicate approximate distances from the facility.

Production well \approx 20' from north edge of land treatment area.

2.2 Is a regional hydrogeologic map of the area included? (This information may be shown on 2.1)

(Y/N) N

If yes:

2.2.1 Are major areas of recharge/discharge shown?

(Y/N) —

If yes, describe. _____

2.2.2 Is the regional ground-water flow direction indicated?

(Y/N) —

2.2.3 Are the potentiometric contours logical?

(Y/N) —

If not, explain. _____

2.3 Is a facility plot plan included?

(Y/N) —

2.3.1 Are facility components (landfill areas, impoundments, etc.) shown?

(Y/N) Y

2.3.2 Are any seeps, springs, streams, ponds, or wetlands indicated?

(Y/N) Y

- 2.3.3 Are the locations of any monitoring wells, soil borings, or test pits shown? (Y/N) Y
- 2.3.4 Is the facility a multi-component facility? (Y/N) N
- If yes:
- 2.3.4.1 Are individual components adequately monitored? (Y/N) -
- 2.3.4.2 Is a Waste Management Area delineated? (Y/N) -
- 2.4 Is a site water table (potentiometric) contour map included? (Y/N) Y
- If yes,
- 2.4.1 Do the potentiometric contours appear logical based on topography and presented data? (Consult water level data) (Y/N) Y
- 2.4.2 Are groundwater flowlines indicated? (Y/N) Y
- 2.4.3 Are static water levels shown? (Y/N) Y
- 2.4.4 May hydraulic gradients be estimated? (Y/N) Y
- 2.4.5 Is at least one monitoring well located hydraulically upgradient of the waste management area(s)? (Y/N) Y
- 2.4.6 Are at least three monitoring wells located hydraulically downgradient of the waste management area(s)? (Y/N) Y
- 2.4.7 By their location, do the upgradient wells appear capable of providing representative ambient groundwater quality data? (Y/N) Y

If no, explain. _____

3.0 Soil Boring/Test Pit Details

3.1 Were soil borings/test pits made under the supervision of a qualified professional?

(Y/N) Y

If yes,

3.1.1 Indicate the individual(s) and affiliation(s): Julie Rutherford
Williams & Works

3.1.2 Indicate the drilling/excavating contractor, if known Stearns Drilling

3.2 If soil borings/test pits were made, indicate the method(s) of drilling/excavating:

- Auger (hollow or solid stem) ✓
- Mud rotary
- Air rotary
- Reverse rotary
- Cable tool
- Jetting
- Other, including excavation (explain)

3.3 List the number of soil borings/test pits made at the site

3.3.1 Pre-existing

3.3.2 For RCRA compliance 57

3.4 Indicate borehole diameters and depths (if different diameters and depths use TABLE B-1).

3.4.1 Diameter: See attachment to B-1

3.4.2 Depth:

3.5 Were lithologic samples collected during drilling?

(Y/N) Y

If yes,

3.5.1 How were samples obtained? (Check method(s))

- Split spoon ✓
- Shelby tube, or similar
- Rock coring
- Ditch sampling
- Other (explain)

Summary of Soil Borings

<u>Location by Field (if applicable)</u>	<u>Boring Log Number</u>	<u>Total Depth</u>	<u>Observation Well</u>
	1		#1*
	2		#2*
	3		#3*
Black S L	4	144"	
	5	204"	#4
Blue S E	6	24"	
Blue	7	32 1/2"	
Blue	8	168 1/2"	
Blue	9	29 1/2"	
Blue	10	28"	
Blue	11	30 1/2"	
Blue	12	29 1/2"	
Blue	13	31"	
Blue	14	28"	
Blue	15	27 1/2"	
Blue	16	32 1/2"	
Blue	17	31 1/2"	
Blue	18	32"	
Blue	19	30 1/2"	
Blue	20	33"	
Blue	21	27 1/2"	
Blue	22	31"	
Red	23	30 1/2"	
Red	24	105 1/2"	
Red	25	32"	
Red	26	31"	
Red	27	31"	
Red	28	31"	

Location
Field
(applicable)

Boring
Log
Number

Total
Depth

Observation Well

Blue	SE	29	144"
Red	N	30	33"
Red		31	32 1/2"
White		32	30 1/2"
White		33	28 1/2"
White		34	33"
White	SE	35	30"
White		36	34"
White		37	32 1/2"
White		38	30"
Blue		39	141"
Blue	SE	40	143"
Red		41	176"
Red		42	200"
White		43	166"
White		44	179 1/2"
		45	243"
		46	204"
Black		47	283"
Green		48	176"
Green		49	138"
Black		50	264"
Red		51	300"
Black		52	278"
White		53	252"
White		54	244"
Green		55	26 1/2"
Green		56	31"
Green		57	31"

#5

#6

* Wells installed during 1977.

[illegible]

3.5.2 At what interval were samples collected? Varying

3.5.3 Were the deposits or rock units penetrated described? (boring logs, etc.) (Y/N) Y

3.6 If test pits were excavated at the site, describe procedures. Backhoe used for visual determination of old pit excavation

4.0 Well Completion Detail

4.1 Were the wells installed under the supervision of a qualified professional? (Y/N) Y

If yes:

4.1.1 Indicate the individual and affiliation, if known Wells 1, 2, 3, 4 Julie Rutherford - Williams & Works
Various (Fishbirk, Thompson, Cuen & Huber, Total, IT Corp, W & W)

4.1.2 Indicate the well construction contractor, if known Various
(Stearns, Wilcox, Sauntest & Total)

4.2 List the number of wells at the site

4.2.1 Pre-existing

4.2.2 For RCRA Compliance

4.3 Well construction information (fill out INFORMATION TABLE B-2)

4.3.1 If PVC well screen or casing is used, are joints (couplings):

- Glued on
- Screwed on Y

4.3.2 Are well screens sand/gravel packed? (Y/N) Y

INFORMATION TABLE B-2 - Page 1

		Down	Down	Down	UP	Down	Down
WELL NO.		MW-3	MW-5	MW-15	MW-18	MW-19	MW-21
GROUND ELEVATION		—	—	—	—	—	—
TOTAL DEPTH		16.25'	20.3±	22'	21'	17'	23'
WELL CASING	TYPE MATERIAL	Galv.	Galv.	Galv.	Galv.	Galv.	Galv.
	DIAMETER	2"	2"	2"	2"	2"	2"
	LENGTH	18'	—	—	—	—	—
	STICK-UP	—	—	—	—	—	2½'
	TOP ELEVATION	748.47	748.34	745.07	749.09	744.77	744.06
	BOTTOM ELEVATION	—	—	—	—	—	—
WELL SCREEN	DEPTH TOP/BOTTOM	/	/	/	/	/	/
	TYPE MATERIAL	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
	DIAMETER	1¼"	1¼"	2"	2"	2"	2"
	LENGTH	2.5'	2'	3'	3'	3'	3'
	SLOT SIZE	80 Gauze	80 Gauze	?	#10 slot	?	?
	TOP ELEVATION	—	—	—	—	—	—
	BOTTOM ELEVATION	—	—	—	—	—	—
OPEN HOLE OR SAND/GRAVEL PACK	DEPTH TOP/BOTTOM	/	/	/	/	/	/
	DIAMETER	—	—	—	—	—	—
	LENGTH	8½'	?	—	—	—	—
	TOP ELEVATION						
	BOTTOM ELEVATION						

4.3.3 Are annular spaces sealed?

(Y/N) Y

If yes, describe:

- bentonite slurry
- Cement grout
- Other (explain)

✓

- Thicknesses of seals Varies (some wells → unknown if sealed others vary 8-15')

4.3.4 If "open hole" wells, are the cased portions sealed in place? (Y/N) N/A

If yes, describe how:

4.3.5 Are there cement surface seals?

(Y/N) N

If yes,

- How thick?

4.3.6 Are the wells capped?

(Y/N) Y

If yes,

- Do they lock?

(Y/N) N

4.3.7 Are protective standpipes cemented in place?

(Y/N) N

4.3.8 Were wells developed?

(Y/N) Unknown

If yes, check appropriate method(s):

- Air lift pumping
- Pumping and surging
- Jetting
- Bailing
- Other (explain)

5.0 Aquifer Characterization

5.1 Has the extent of the uppermost saturated zone (aquifer) in the facility area been defined?

(Y/N) Y

If yes,

5.1.1 Are soil boring/test pit logs included?

(Y/N) Y

5.1.2 Are geologic cross-sections included?

(Y/N) Y

Down Down Down Down

WELL NO.		MW-20	MW-16	MW-23	MW-30		
GROUND ELEVATION		—	—	—	—		
TOTAL DEPTH		24'	27 $\frac{3}{4}$ '	27'	21'		
WELL CASING	TYPE MATERIAL	Galv.	Galv.	Galv.?	Plastic		
	DIAMETER	2"	2"	2"	4"		
	LENGTH	—	—	—	—		
	STICK-UP	?	3'11"	3'	2'		
	TOP ELEVATION	746.96	750.37	747.00	747.63		
	BOTTOM ELEVATION	—	—	—	—		
WELL SCREEN	DEPTH TOP/BOTTOM	/	/	/	/	/	/
	TYPE MATERIAL	Stainless Steel	Stainless Steel	Stainless Steel	Plastic		
	DIAMETER	2"?	2"	2"	4"		
	LENGTH	3'	5'	3'	10'		
	SLOT SIZE	#12	?	#7	#10		
	TOP ELEVATION	—	—	—	—		
	BOTTOM ELEVATION	—	—	—	—		
OPEN HOLE OR SAND/GRAVEL PACK	DEPTH TOP/BOTTOM	/	/	/	/	/	/
	DIAMETER						
	LENGTH						
	TOP ELEVATION						
	BOTTOM ELEVATION						

5.2 Is there evidence of confining (low permeability) layers beneath the site?

(Y/N) ✓

If yes,

5.2.1 Is the areal extent and continuity indicated?

(Y/N) ✓

5.2.2 Is there any potential for saturated conditions (perched water) to occur above the uppermost aquifer? (Y/N) ✓

If yes, give details: Very complex glacial geology
No evidence, but could exist as isolated
lenses

a) Should or is this perched zone being monitored?

(Y/N) —

Explain

5.2.3 What is the lithology and texture of the uppermost saturated zone (aquifer)?

Fine sand, silty

5.2.4 What is the saturated thickness, if indicated?

0-15 ft.

5.3 Were static water levels measured?

(Y/N) ✓

If yes,

5.3.1 How were the water levels measured (check method(s)).

- Electric water sounder
- Wetted tape
- Air line
- Other (explain)

✓
—
—

5.3.2 Do fluctuations in static water levels occur?

(Y/N) ✓

If yes,

5.3.2.1 Are they accounted for (e.g. seasonal, tidal, etc.)?

(Y/N) ✓

If yes, describe: Seasonal

5.3.2.2 Do the water level fluctuations alter the general ground-water gradients and flow directions?

(Y/N) N

If yes,

5.3.2.3 Will the effectiveness of the wells to detect contaminants be reduced?

(Y/N) N

Explain _____

5.3.2.4 Based on water level data, do any head differentials occur that may indicate a vertical flow component in the saturated zone?

(Y/N) Unknown

If yes, explain _____

5.4 Have aquifer hydraulic properties been determined?

(Y/N) ✓

If yes,

5.4.1 Indicate method(s):

- Pumping tests ✓
- Falling/constant head tests _____
- Laboratory tests (explain) _____

5.4.2 If determined, what are the values for:

- Transmissivity _____
- Storage coefficient _____
- Leakage _____
- Permeability 140 gal / ft² / day
- Porosity _____
- Specific capacity _____

5.4.3 In cases where several tests were undertaken, were discrepancies in the results evident?

(Y/N) N/A

If yes, explain _____

5.4.4 Were horizontal ground-water flow velocities determined?

(Y/N) ✓

If yes, indicate rate of movement Approx 0.3 ft / day

6.0 Well Performance

6.1 Are the monitoring wells screened in the uppermost aquifer? (Y/N) Y

6.1.1 Is the full saturated thickness screened? (Y/N) N

6.1.2 For single completions, are the intake areas in the:
(check appropriate levels)

- Upper portion of the aquifer
- Middle of the aquifer
- Lower portion of the aquifer

Mostly

6.1.3 For well clusters, are the intake areas open to different portions of the aquifer? (Y/N) N/A

6.1.4 Do the intake levels of the monitoring wells appear to be justified due to possible contaminant density and groundwater flow velocity? (Y/N) Y

7.0 Ground-Water Quality Sampling

7.1 Is a sampling (groundwater quality) program and schedule included? (Y/N) Y no schedule

7.2 Are sample collection field procedures clearly outlined? (Y/N) Y

7.2.1 How are samples obtained: (check method(s))

- Air lift pump
- Submersible pump
- Positive displacement pump
- Centrifugal pump
- Peristaltic or other suction-lift pump
- Bailer
- Other (describe)

pitcher pump

7.2.2 Are all wells sampled with the same equipment and procedures? (Y/N) N

If no, explain bailer + pitcher pump used on different wells

7.2.3 Are adequate provisions included to clean equipment after sampling to prevent cross-contamination between wells? (Y/N) Y

7.2.4 Are organic constituents to be sampled?

(Y/N) Y

If yes,

7.2.4.1 Are samples collected with equipment to minimize absorption and volatilization?

(Y/N) N

If yes,

Describe equipment _____

8.0 Sample Preservation and Handling

8.1 Have appropriate sample preservation and preparation procedures been followed (filtration and preservation where appropriate)?

(Y/N) Y

8.2 Are samples refrigerated?

(Y/N) Y

8.3 Are EPA recommended sample holding period requirements adhered to?

(Y/N) Y

8.4 Are suitable container types used?

(Y/N) Y

8.5 Are provisions made to store and ship samples under cold conditions (ice packs, etc.)?

(Y/N) Y

8.6 Is a chain of custody control procedure clearly defined?

(Y/N) Y

8.7 Is a specific chain of custody form illustrated?

(Y/N) Y

If yes,

8.7.1 Will this form provide an accurate record of sample possession from the moment the sample is taken until the time it is analyzed?

(Y/N) Y

9.0 Sample Analysis and Record Keeping

9.1 Is sample analysis performed by a qualified laboratory?

(Y/N) Y

Indicate lab Total Petroleum Lab (NPDES approved)

9.2 Are analytical methods described in the records?

(Y/N) Y

9.2.1 Are analytical methods acceptable to EPA?

(Y/N) Y

9.3 Are the required drinking water suitability parameters tested for?

(Y/N) Y

9.4 Are the required groundwater quality parameters tested for?

(Y/N) Y

9.5 Are the required groundwater contamination indicator parameters tested for? (Y/N) Y

9.6 Are any analytical parameters determined in the field? (Y/N) Y

at on-site lab

Identify:

- pH Y
- Temperature Y
- Specific conductance Y
- Other (describe) _____

9.7 Is a plan included to record information about each sample collected during the groundwater monitoring program? (Y/N) Y

9.7.1 Are field activity logs included? (Y/N) Y

9.7.2 Are laboratory results included? (Y/N) Y

9.7.3 Are field procedures recorded? (Y/N) Y

9.7.4 Are field parameter determinations included? (Y/N) Y

9.7.5 Are the names and affiliation of the field personnel included? (Y/N) Y

9.8 Are statistical analyses planned or shown for all water quality results where necessary? (Y/N) Y

9.8.1 Is an analysis program set-up which adheres to EPA guidelines? (Y/N) _____

9.8.2 Is Student's t-test utilized? (Y/N) _____
If other evaluation procedure used, identify _____

9.8.3 Are provisions made for submitting analysis reports to the Regional Administrator? (Y/N) _____

10.0 Site Verification

10.1 Plot Plan indicating the locations of various facility components, ground-water monitoring wells, and surface waters? (Y/N) Y

10.1.1 Is the plot plan used for the inspection the same as in the monitoring program plan documentation? (Y/N) Y

If not, explain _____

10.1.2 Are all of the components of the facility identified during the inspection addressed in the monitoring program documentation? (Y/N) _____

If not, explain _____

10.1.3 Are there any streams, lakes or wetlands on or adjacent to the site? (Y/N) _____

If yes, indicate distances from waste management areas _____

10.1.4 Are there any signs of water quality degradation evident in the surface water bodies? (Y/N) _____

If yes, explain _____

10.1.5 Is there any indication of distressed or dead vegetation on or adjacent to the site? (Y/N) N

If yes, explain _____

10.1.6 Are there any significant topographic or surficial features on or near the site (e.g., recharge or discharge areas)? (Y/N) _____

If yes, explain _____

10.1.7 Are the monitor well locations and numbers in agreement with the monitoring program documentation? (Y/N) Y

If no, explain _____

10.1.7.1 Were locations and elevations of the monitor wells surveyed into some known datum? (Y/N) _____

If not, explain _____

10.1.7.2 Were the wells sounded to determine total depth below the surface?

(Y/N) Y

If not, explain _____

10.1.7.3 Were discrepancies in total depth greater than two feet apparent in any well?

(Y/N) N

If yes, explain _____

10.1.8 Was ground water encountered in all monitoring wells?

(Y/N) Y

If not, indicate which well(s) were dry _____

10.1.9 Were water level elevations measured during the site visit?

(Y/N) Y

If yes, indicate well number and water level elevation MW15-7.93

MW18-8.45 MW19-6.31 MW20-7.97 MW21-7.42 MW30-9.26

If not, explain _____

APPENDIX - C

GROUND-WATER QUALITY ASSESSMENT PROGRAM
INFORMATION FORM

APPENDIX C

GROUND-WATER QUALITY ASSESSMENT PROGRAM
INFORMATION FORM

Company Name: Total Petroleum ; EPA I.D.#: MID 005358130

Company Address: East Superior
Alma, MI

Inspector's Name: McNiel ; Date: 5-29-86

1.0 Background

- 1.1 List the constituents (contaminants) originating from the waste management area: (use separate sheet if necessary) TOC, Specific Conductance

TOC → Naphthenic acids, thiophenic sulfones (Oxidized, weathered petroleum)
Conduct → Na, Cl ; phenols

- 1.2 Have the concentrations of the hazardous waste or hazardous waste constituents shown significant increases in:

- upgradient monitoring wells
- downgradient monitoring wells

(Y/N) N
(Y/N) Y

- 1.2.1 List or indicate on a map, the wells which have shown significant increases: (use separate sheet if necessary) mw's 15, 19, 20, 21, 30, 23

- 1.3 Were the significant increases in contaminant concentration determined through the use of the student's t-Test?

(Y/N) Y

If no,

- 1.3.1 Explain procedure used —

- 1.4 Has the possibility of error (e.g., laboratory) been eliminated? (Y/N) Y

- 1.4.1 Explain —

INFORMATION TABLE C-1

WELL NO.		MW-1	MW-1A	MW-2	MW-4	MW-17	MW-27
GROUND ELEVATION		—	—	—	—	—	—
TOTAL DEPTH		19.5'	20'	16'	16.92'	18.9'	26'
WELL CASING	TYPE MATERIAL	Galv.	Galv.?	Galv.	Galv.	Galv.	Plastic
	DIAMETER	2"	2"	2"	2"	2"	4"
	LENGTH	18'	20'	17.5'	—	—	—
	STICK-UP	—	2'	4'±	—	2½'	2'
	TOP ELEVATION	748.33	750.23	748.66	745.45	750.17	751.23
	BOTTOM ELEVATION						—
WELL SCREEN	DEPTH TOP/BOTTOM	/	/	/	/	/	16 26
	TYPE MATERIAL	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	?	Plastic
	DIAMETER	1¼"	2"	1¼"	1¼"	?	—
	LENGTH	2½'	2'	2½'	3½'	5'	10'
	SLOT SIZE	80 Gauze	#7	80 Gauze	?	—	#10
	TOP ELEVATION						
	BOTTOM ELEVATION						
OPEN HOLE OR SAND/GRAVEL PACK	DEPTH TOP/BOTTOM	/	/	/	/	/	/
	DIAMETER						
	LENGTH						
	TOP ELEVATION						
	BOTTOM ELEVATION						

2.0 Contaminant Characteristics

- 2.1 If available, list the chemical and physical properties of the contaminants which have been detected in the ground water: (density, solubility, etc.). Include on a separate sheet if list is extensive Not available
-
-

3.0 Implementation of the Assessment Program

- 3.1 Has the extent of the migration of hazardous waste or hazardous waste constituents been determined?

(Y/N) N/

If yes,

- 3.1.1 Indicate how: (check appropriate method(s))

- additional ground-water monitoring wells
- geophysical methods
- computer simulation
- other, explain

Attempting to determine by wells

- 3.2 Were monitoring wells installed?

(Y/N) ✓

If yes,

- 3.2.1 Record monitoring well/piezometer completion data on INFORMATION TABLE mw's, 20, 21, 23, 30
C-1.

- 3.2.2 Were well clusters (nests) used or were wells with multiple intake areas constructed? Give details N/a
-
-

- 3.2.3 Show the numbers and locations of the additional wells/piezometers on a site map.

- 3.2.4 Are the locations of the wells/piezometers justified in view of the water table or potentiometric surface map?
Give details

(Y/N) ✓

INFORMATION TABLE C-1

WELL NO.		MW-28	MW-29	MW-22			
GROUND ELEVATION		—	—	—			
TOTAL DEPTH		26'	21'	14'			
WELL CASING	TYPE MATERIAL	Plastic	Plastic	Galv.			
	DIAMETER	4"	4"	2"			
	LENGTH	—	—	—			
	STICK-UP	2'	2"	2½'			
	TOP ELEVATION	750.15	748.49	744.20			
	BOTTOM ELEVATION	—	—	—			—
WELL SCREEN	DEPTH TOP/BOTTOM	14 26	11 21	/	/	/	/
	TYPE MATERIAL	Plastic	Plastic	Stainless Steel			
	DIAMETER	4"	4"	2"			
	LENGTH	10'	10'	3'			
	SLOT SIZE	#10	#10	—			
	TOP ELEVATION						
	BOTTOM ELEVATION						
OPEN HOLE OR SAND/GRAVEL PACK	DEPTH TOP/BOTTOM	/	/	/	/	/	/
	DIAMETER						
	LENGTH						
	TOP ELEVATION						
	BOTTOM ELEVATION						

3.2.5 Are the depths of the monitoring wells/
piezometers justified due to the relative
characteristics (e.g., densities) of the contaminants? (Y/N) ✓
Give details _____

3.2.6 List any other methods (e.g., soil sample analysis)
used to document the extent of the contamination.
(use separate sheet if necessary) Soil analysis beneath
the land treatment area have been done
to define soil contamination

3.3 Has the rate of contaminant migration been determined? (Y/N) ✓

If yes, what is it and how was it determined? _____

Dump test (K = 140 gal/Lt²/day maximum)

3.3.1 Does the rate of migration differ for various
contaminants? (Y/N) _____
Give details Not determined at this time.

3.3.2 If known, what is the cause (reason) of (for) this
differential in migration rates? _____

APPENDIX - D

WAIVER DEMONSTRATION TECHNICAL INFORMATION FORM

N/A

APPENDIX D

WAIVER DEMONSTRATION TECHNICAL INFORMATION FORM

Company Name: _____; EPA ID.#: _____

Company Address: _____

Inspector's Name: _____; Date: _____

1.0 Site Characterization

Regional Map (U.S.G.S., 7.5 min. Topographic Quadrangle Map, or similar) showing facility location with water supply wells near the facility indicated.

1.0.1 Are there discharging wells near the facility? (Y/N) _____

If yes, give distances to wells _____

1.0.1.1 Which aquifers in the vicinity provide water supplies? _____

1.0.1.2 What is the estimated withdrawal (diversion) rate from these aquifers? _____

1.0.2 Are there any streams, rivers, or lakes near the facility? (Y/N) _____

1.0.2.1 If so, indicate approximate distances from the facility. _____

1.1 Regional Hydrogeologic/Surficial Geologic Map

1.1.1 Is the surficial geology adequately illustrated? (Y/N) _____

1.1.2 Are areas of recharge/discharge shown? (Y/N) _____

1.1.3 Is regional groundwater flow direction indicated? (Y/N) _____

1.1.4 Are the water table or potentiometric contours logical? (Y/N) _____

1.2 Map of Facility (scale at least 1" = 200'), showing the locations of facility components (e.g., surface impoundments, and disposal areas), and groundwater monitoring wells, springs, seeps, streams, etc.

1.2.1 Is the facility a multi-component facility? (Y/N) _____

1.2.2 Are locations of test borings (or pits) and observation wells shown? (Y/N) _____

1.2.2.1 Are borings, pits, or wells located in or near the waste management area? (Y/N) _____

If yes,

1.2.2.2 Do the borings, pits, or wells appear to be of such number, and depth to adequately characterize the substrate? (Y/N) _____

Give brief detail _____

1.3 Boring Logs and Geologic Cross Sections

1.3.1 Are there logs of the borings or test pits? (Y/N) _____

1.3.2 How are the sub-surface materials described:
(check as appropriate)

1.3.2.1 Unified Soil Classification System _____

1.3.2.2 U.S.D.A. Soil Classification System _____

1.3.2.3 Burmeister Classification System _____

1.3.2.4 Other (explain) _____

1.3.3 Are geologic cross-sections included? (Y/N) _____

1.3.4 Is there evidence of confining (low permeability) layers beneath the facility? (Y/N) _____

2.0 Waste Characterization

2.1 Has the waste material been stabilized in any way to preclude the potential of leachate being generated? (Y/N) _____

If yes, briefly explain methods _____

2.2 Have specially engineered features been incorporated into the facility design to minimize the migration of leachate? (Y/N) _____

If yes, briefly explain _____

3.0 Water Balance

3.1 Is precipitation data included? (Y/N) _____

3.1.1 How is it tabulated? (check one)

- Daily _____
- Weekly _____
- Monthly _____
- Annually _____

3.1.2 Source of data (check one)

- U.S. Weather Service _____
 - State Agency _____
 - Other Source _____
- Identify _____

3.1.3 Length of record, in years _____

3.1.4 Distance of measuring point from the facility _____

3.2 Is actual evapotranspiration (AET) data included? (Y/N) _____

3.2.1 Is the source of AET data indicated? (Y/N) _____

If yes, give reference _____

3.3 Is run-off calculated? (Y/N) _____

3.3.1 Is the technique referenced? (Y/N) _____

If yes, give reference _____

3.4 Is infiltration data included? (Y/N) _____

3.4.1 Is source of data referenced? (Y/N) _____

If yes, give reference _____

3.5 Is there a positive net infiltration recorded? (Y/N) _____

If yes, how much? _____

4.0 Unsaturated Zone Characteristics

4.1 Has the applicant demonstrated that the unsaturated zone will isolate any waste derived leachate from the water table, chemically or physically? (Y/N) _____

Briefly describe mechanism(s) _____

4.2 Physical Properties

4.2.1 Has the applicant defined the unsaturated thickness and areal variability? (Y/N) _____

Briefly describe _____

4.2.2 Has the primary and secondary porosity (if any) of the unsaturated zone been determined? (Y/N) _____

Briefly describe _____

4.2.3 Have hydraulic conductivity curves for each sediment type comprising the unsaturated zone been established? (Y/N) _____

4.2.4 Have textural analyses been performed? (Y/N) _____

4.2.5 Have bulk densities been estimated? (Y/N) _____

4.3 Chemical Properties

4.3.1 Has cation exchange been cited as an attenuation means? (Y/N) _____

If yes,

4.3.1.1 Type of clay _____

4.3.1.2 Percent of clay _____

4.3.1.3 Percent of organics _____

4.3.1.4 pH of materials _____

4.3.2 Have other attenuation mechanisms, if any, been adequately explained?

(Y/N) _____

If yes, cite mechanism:

4.3.2.1 Biodegradation _____

4.3.2.2 Complexation _____

4.3.2.3 Precipitation _____

4.3.2.4 Chelation _____

4.3.2.5 Other _____

5.0 Saturated Zone Physical Characteristics

5.1 Have the saturated zone hydrologic properties been determined?

(Y/N) _____

If yes, were pumping tests performed to determine (check appropriate determinations and give results)

5.1.1 Transmissivity _____

5.1.2 Hydraulic Conductivity _____

5.1.3 Storage Coefficient _____

5.1.4 Leakage _____

5.2 How many tests were performed? _____

5.2.1 The duration(s) of test(s) _____

5.2.2 The length(s) of the recovery test(s) _____

5.3 Were other insitu tests performed?

(Y/N) _____

(check appropriate tests)

5.3.1 Falling head tests _____

5.3.2 Constant head tests _____

5.3.3 Packer tests _____

5.3.4 Other _____

Explain _____

5.4 Was the saturated thickness determined?

(Y/N) _____

- 5.5 Are static water level measurements included? (Y/N) _____
- 5.6 Is a site water table (equipotential) contour map included? (Y/N) _____
- 5.6.1 Does the contour map appear logical based on the presented data and topography? (Y/N) _____
- 5.6.2 Are groundwater flowlines indicated? (Y/N) _____
- 5.6.3 Are hydraulic gradients included? (Y/N) _____
- 5.6.4 Are flow velocities included? (Y/N) _____
- 5.7 Is there any indication of vertical flow in the saturated zone? (Y/N) _____
- 5.8 Saturated Zone Chemical Properties of Ground Water
- 5.8.1 Have water quality analyses been performed to establish background data? (Y/N) _____
- 5.8.2 Does background information indicate that the aquifer may be degraded in any way? (Y/N) _____
- 6.0 Computer Modeling
- 6.1 Was a computer simulation utilized in the demonstration? (Y/N) _____
- Check appropriate model:
- 6.1.1 Mass transport _____
- 6.1.2 Flow model _____
- 6.2 Type of model? (check appropriate type)
- 6.2.1 Numerical _____
- 6.2.2 Analytic _____
- 6.2.3 Reference for model? _____
- _____
- _____
- 6.2.4 Does the data appear to warrant the use of modeling techniques? (Y/N) _____
- If not, explain _____
- _____
- _____

1. U.S. EPA ID <u>MID005358130</u>		3. CITY <u>Alma</u>		4. HANDLER TYPE <input checked="" type="checkbox"/> MAJOR <input type="checkbox"/> NON - MAJOR							
2. INSTALLATION NAME <u>Total Petroleum, Inc.</u>											
5. DATE OF INITIAL EVALUATION WHICH IS THE BASIS FOR THIS REPORT <u>7</u> <u>12</u> <u>83</u> M D Y		6. TYPE OF EVALUATION COVERED BY THIS REPORT (Check only one)		<input type="checkbox"/> 1 Evaluation Inspection <input type="checkbox"/> 2 Sampling Inspection <input type="checkbox"/> 3 Record Review <input checked="" type="checkbox"/> 4 Groundwater Evaluation <input type="checkbox"/> 5 Followup Inspection		<input type="checkbox"/> 6 Citizen Complaint <input type="checkbox"/> 7 Part B Call-In <input type="checkbox"/> 8 Withdrawal <input type="checkbox"/> 9 Closed Facility <input type="checkbox"/> 0 Other					
7. DATE OF EVALUATION IF THE EVALUATION FOLLOWS AN INITIAL EVALUATION (Enter date only if different from 5.) <u>5</u> <u>29</u> <u>86</u> M D Y											
8. AREA & CLASS OF VIOLATION (Enter 'X' in box if violations found. Enter 'O' if no violations found.) <u>X</u>		9. EVALUATION COMMENTS									
Class of Violation		Area of Violation						RESP Agency	Free Fields		
		GWM	CL/PC	FIN/RESP	PT B	CMPL/SCH	Manifest	Other			
I									2 3		
II											
10. ENFORCEMENT ACTION (Most frequently used codes are listed below. See Instructions for additional codes.)		11. ENFORCEMENT COMMENTS									
Violation		Action		Compliance Date		Status		Penalty		Resp Agency	Free Fields
Class	Area	Type (use code)	Date Taken	Scheduled	Actual	Code	Date	Assess	Collect		2 3

Codes for Enforcement Actions: 03 = Warning Letter
 04 = Compliance Complaint
 05 = Administrative Order
 10 = Informal

Codes for Enforcement Status: A = Active/progressing to resolution
 R = Resolved/no further action required
 X = Pending/no response
 P = Progressed to subsequent action

Codes for Responsible Agency: S = State
 J = Joint State/U.S. EPA

12. For State Use